

Annual Performance Report Form

Facility Name: Endicott Interconnect Technologies, Inc.

Performance Track ID #: A020028

Annual Performance Report #: 1

Reporting Year: 2001

Due Date: May 1, 2002 Revised: December, 2002 A.1

A.5

A.6

A.7

A.9

A.10

OMB No.2010-0032 Expiration Date: 06/30/03

General Facility Information

To the extent possible, EPA will pre-complete items A.1-A.8 for you. Please ensure that the information in A.1-A.8 below is accurate, complete, and up to date. Please supply or revise any information as necessary and then check the box to the left of the item(s) to indicate where changes have been made. Items A.9 and A.10 cannot be pre-completed; please respond as directed in A.9 and A.10 below.

Did you make changes? If so, check box.

x Name of your facility: Endicott Interconnect Technologies, Inc.

x Name of your parent company: Endicott Interconnect Technologies, Inc.

A 3 x Facility contact person for the Performance Track program:

Name: Mr. Paul A. Speranza

Title: Manager - Environmental and Chemical Services

Phone: (607) 755-6179 Fax: (607) 755-7867 E-mail: speranza@us.ibm.com

A.4 x Facility's location: **Endicott Interconnect Technologies**, **Inc.**

Street Address: 1701 North Street

Street Address (cont.):

City/State/Zip Code: Endicott, New York 13760

x Facility's web site address (if any): To be determined

Number of employees (full-time equivalents) who currently

work in the facility: more than 1,000

Does your company meet the Small Business Administration definition of a small business for your sector? Yes No X

A.8 x North American Industrial Classification System (NAICS) Code(s) that are used to classify

business at the facility: 334412

Bare printed circuit board manufacturing

From http://www.census.gov/epcd/www/naicstab.htm

x In your application and, perhaps, in previous annual performance reports, you described what your facility does or makes. Have there been any (additional) changes to your facility's list of products and/or activities? Yes x No

If so, please list them in the space below.

Effective November 1, 2002, the former IBM printed wiring board business was sold to Endicott Interconnect Technologies, Inc. Endicott Interconnect Technologies will continue in the NEPT program, and is submitting this revised application and commitments to reflect its business. Certain operations were retained by IBM and therefore are not reflected in future Endicott Interconnect Commitments. The real estate

was sold to HURON Real Estate Associates, LLC.

Please update the list of environmental requirements that apply to your facility. In the space below, indicate any changes that have taken place during this reporting period. If you have no changes to report, please write "No changes."

No changes

Environmental Management System

- B.1 **Environmental Management System Assessment.** Please summarize EMS assessments conducted *during the year*. Attach additional sheets as necessary.
 - a. Was an EMS audit or other assessment done by an independent third party?
 Yes X No

If yes, please provide the *type* (e.g., ISO 14001 certification), the *scope*, and the *dates* (mo/yr) of each assessment.

ISO14001 Surveillance Audit was conducted by Bureau Veritas Quality International, Inc. (BVQI) on April 2-5, 2001. Scope: Endicott's Environmental Management System.

ISO14001 certification has been transferred to Endicott Interconnect Technologies, Inc. by BVQI, effective November 1, 2002. ISO14001 transition audit is scheduled for January 2003 and a renewal audit for May 2003.

- b. Was an internal or corporate EMS audit conducted? Yes X No
- If yes, please provide the *scope* and the *dates* (mo/yr) of each audit.
- ? Fourteen (14) internal EMS Audits were conducted in 2001 covering all elements of Endicott's Environmental Management System
- ? Fourteen (14) Chemical Management compliance audits were conducted in 2001
- ? Endicott Interconnect Technologies, Inc will continue the practice of conducting selfaudits as part of its environmental management system.
- c. Was a compliance audit conducted? Yes X No

If yes, please provide the *scope* and the *dates* (mo/yr) of each audit, and indicate *who* conducted the audit(s) (e.g., facility staff, corporate groups, third party).

Four (4) environmental audits were conducted (including the areas of hazardous waste, air, petroleum and wastewater) by Endicott environmental staff in the second and fourth quarter 2001.

• Endicott Interconnect Technologies, Inc will continue the practice of conducting compliance audits as part of its environmental management system.

- d. (Optional) If you would like to describe any other audits or inspections that were conducted at your facility please does so here.
- ? Five (5) regulatory inspections of the Endicott facility were conducted by government regulatory agencies during 2001, including:
- (1) Air NYSDEC 1/12/01
- (2) Air NYSDEC 3/01/01
- (3) Water withdrawal Susquehanna River Basin Commission 3/27/01
- (4) Petroleum USEPA Region 2 6/05/01
- (5) Hazardous Waste compliance NYSDEC 6/19/01

B.1 continued)

e. Briefly summarize corrective actions taken and other improvements made as a result of your EMS assessments and compliance audits.

Endicott Interconnect Technologies environmental management system utilizes a three step approach to review significant non-conformances or incidents. They are:

- 1. Root Cause Evaluation to determine whether the cause of the problem is method, equipment, personnel, material, etc., or a combination of causes. The evaluation may include a determination of whether the problem exists in other areas of the operation.
- 2. <u>Corrective Action</u> -- implementation of action(s) that address actual nonconformance to the EMS or actual/potential regulatory noncompliance. These actions may include but are not limited to: (1) changes to site processes; (2) changes to site internal procedures; (3) changes to training requirements; and (4) changes to site monitoring and measurement programs.
- 3. <u>Preventive Action</u> -- implementation of measure(s) taken to prevent similar nonconformance(s)/noncompliance(s) from recurring

Examples of actions implemented in 2001 as a result of EMS assessments and compliance audits:

- EMS audit checklists were refined
- Employee awareness of the EMS was improved through increased communication using an electronic bulletins and targeted training of new hires
- Enhanced employee "hazardous waste operations" (hazwoper) training to include petroleum Facility Response Plan and Spill Prevention Control and Countermeasures.
- Environmental Operating Procedures were migrated to an improved on-line electronic document control system (QMX)

f. Has your facility corrected all instances of potential noncompliance and EMS nonconformance
identified during your audits and other assessments?

Yes X No

No such instances identified

If no, please explain your plans to correct these instances.

g. When was the last Senior Management review of your EMS completed? Mo/yr March 2002

Who headed the review?

Name: Diana Bendz

Titles: Endicott Senior Location Executive, IBM Corporation

The next annual senior management review will be conducted in early 2003 with

James J. McNamara

President and CEO of Endicott Interconnect Technologies, Inc

- B.2 **ISO 14001 Certification.** Is your facility currently certified to ISO 14001? Yes X No
- B.3 **Environmental Aspects Identification.** When did your facility last conduct a systematic identification and/or review of your environmental aspects? *Mo/yr* **February 5, 2002**
- Progress Toward Achieving Objectives and Targets. In the table below, please provide a narrative summary of progress made toward EMS objectives and targets. You may limit the summary to environmental aspects that are significant and towards which progress has been made during the reporting year. In cases where progress relates specifically to a Performance Track performance commitment, complete the Environmental Aspect column, but in the Progress column simply refer to the performance commitment tables in Section C, i.e. "See Section C." Attach additional sheets as necessary.

Environmental Aspect for 2001	rogress Made This Year .g., quanti tative or qualitative improvements, activities conducted)					
Chemical/Petroleum Bulk Storage/Distribution	 Completed replacement of Building 18-0 Cupric tanks Completed integrity assessments on Petroleum Storage Tanks Developed, trained and equipped an in-house oil spill response team 					
Non-hazardous Waste (Industrial/Solid)	See Section C for detail					
Energy Use	See Section C for detail					
Chemical Use/ Release	? Installed new air abatement fume scrubber in Bldg. 258					
Hazardous Waste	See Section C for detail					
Products	Development engineers researching the use of lead-free solders					
Water Use	See Section C for detail					

Environmental Performance Commitments

C.1 Performance Commitment 1

a. Use this table to report data related to your first performance commitment.

Category (see page 16 of the	ne instructions):	Waste			
Aspect (see page 16 of the	instructions): No	onhazardous Sc	olid Waste Recy	cling	
	Baseline (as stated in your application)	Year 1	Year 2	Year 3	Performance Commitment (the goal stated in your application)
Calendar Year	1999	2001	2002	2003	Recycle at least 65% of non- hazardous solid waste generated
Actual Quantity (per year)	25042	21072			
Measurement Units	Tons of Recyc	led Solid Waste			
Normalizing Factor*	1.0	.840			(optional)
Basis for your Normalizing Factor*	Total nonhazardous waste generated for 2001 (22845 Tons) declined 16% compared to base year 1999 (27206 Tons) due to a slowdown in production and a decreased volume of end-of-life equipment coming in to be processed by our Asset Recovery operation. Normalizing Factor = Total Waste Volume for 2001 / Total Waste Volume for 1999 Normalizing Factor = 22845 Tons / 27206 Tons = 0.8397 = 0.840 Normalized Quantity Recycled = Actual Volume Recycled / Normalizing Factor For 2001, Normalized Quantity = 21072 / .84 = 25086 Tons Same calculation for normalizing factor is used by Endicott Interconnect Technologies, Inc for reporting achievement from October 2002 to Yr 2003				
Normalized Quantity* (per year)	25042	25086	acmevement nor	TOCIODEI 200	Goal (normalized to production): Total of 66519 ton after three years

Comments: The annual recycling goal of 92% has been restated to 65% because highly recyclable streams from asset recovery operations are not part of the divestiture of the printed wiring board manufacturing business to Endicott Interconnect Technologies. The 65% goal is effective November 1, 2002.

^{*}See pages 17-19 of the instructions for more information

b. Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.

In Yr 2001, while maintaining existing recycle programs, the Endicott plant also diverted more mixed media packaging (foam/corrugated) out of landfill volumes and into energy recovery, thus helping to maintain a 92% recycle rate stated in the original 1999 application, although less total solid waste was generated overall.

Endicott Interconnect Technologies, Inc. will continue to place a high focus on recycling of solid wastes with a goal to recycle 65% of non-hazardous solid waste generated by its printed wiring board manufacturing operations.

The 3-year goal in terms of tons of recycled nonhazardous solid waste:

Based on Yr 1999 nonhazardous waste generation and normalized to production: average of 25030 tons of nonhazardous solid waste recycles per year through October 2002.

Beginning November 1, 2002; Endicott Interconnect Technologies goal is to recycle at least 65% of its non-hazardous solid waste generated: average of 17684 tons of nonhazardous solid waste recycles per year from November 2002.

Over the 3 year period, normalized to production (i.e. – waste generation), and accounting for the change in % goal the 3 year normalized goal in tonnage is 66519 tons.

c. Please list any other EPA voluntary programs to which you are also reporting these data (e.g., Energy Star, Project XL).

(continued)

C.2

Performance Commitment 2

a. Use this table to report data related to your second performance commitment.

Aspect (see page 16 of t	he instructions): Wa	ater Use Conse	rvation		
	Baseline (as stated in your application)	Year 1	Year 2	Year 3	Performance Commitment (the goal stated in your application)
Calendar Year	1999	2001	2002	2003	2% Average Annual Reduction, Adjusted for Production
Actual Quantity (per year)	734.68	707.72			
Measurement Units	Millions of Gal	llons (Mgal) Us	sed		
Normalizing Factor*	1.0	1.028			(optional)
	of water saved to In Yr 2000: Yr 1999 manufar Yr 2000 Product Current Year (Year (Year 2000 Saving Current Year (Year 2001: Yr 2001 manufar Yr 2001 Product Current Year (Year 2001 Saving Factor) Average Norm = (1.095 + 0.96)	from implements acture usage = 3 acture usage = 3 fr 2000) actual usure from utilities/sa fr 2000) projecte 1999) actual total acture usage = 3 acture usage = 3 acture usage = 3 fr 2001) actual usure from utilities/sa from utilities/sa acture usage = 3 acture u	054 Itilities/sanitary wanitary water consult total water usage = 7 It water usage = 7 It = 804.21 Mgal	ater use = 436.6 ervation project: ge = 804.21 Mg 734.68 Mgal = / 734.68 Mgal = ervation project = 706.23 Mgal / 734.68 Mgal / 734.68 Mgal / 734.68 Mgal =	ation projects 61 Mgal s = 32.91 Mga al 1.095 60 Mgal s = 22.42 Mga 0.961
		to Base Year =		la. Hater douge	Yr 2003

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*See pages 17-19 of the instructions for more information

b. Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.

The original application commitment for the Endicott facility was to reduce consumption of water by 2% annually when normalized for production. During 2001, waste conservation was achieved through:

- Reuse of non-contact cooling water of chilled water for process cooling
- Use of process cooling water for Acid Copper Plater cooling instead of well water
- Use closed-loop chilled water for press cooling instead of once-through well water or city water
- Reduce use by increasing rinse efficiency, reducing rinse time, upgrading equipment and consolidating support unit.
- Use of counter-flow rinses and fluid-head rinse technology to conserve water consumption and reduce waste on the Horizontal and Vertical Copper Platers
- Eliminated perchloroethylene, allowing shut down of one Carbon Adsorption Unit, thereby reducing one time steam use for carbon regeneration and resulting wastewater discharge
- Upgraded incoming supply steam line for Burkle Stream Press; this improved recovery rate of hot water and reduced steam usage
- Use cascading rinse in rinse chamber of Chem-Polish and reduce flow from 5 to 1 Gallons Per Minute
- Replace Free Chlorine Analyzer in RODI building reducing water usage from 2.5 Gallons Per Minute to 11 Gallons Per Hour for sampling
- Replace old tool with more water-efficient model for manufacturing (replace Udylite with Atotech)
- Use of conductivity sensors and parts sensors to control water usage.

Total water saving from implemented projects:

Yr 2000:

Manufacture water use conservation projects → 990,000 gallon

Utilities/Sanitary water use conservation projects → 32.91 Million gallon

Yr 2001:

Manufacture water use conservation projects → 460,000 gallon

Utilities/Sanitary water use conservation projects → 22.42 Million gallon

3-year water conservation goal, normalized to production = Base Year water use (734.68) * 0.98 (Yr 2000 goal) * 0.98 (Yr 2001 goal) * 0.98 (Yr 2002 goal) * 0.98 (Yr 2003 goal) = 677.65 million gallon

Effective November 1, 2002, Endicott Interconnect Technologies will continue the water conservation program, with the same goal of 2% water conservation annually. Water Conservation projects will be identified and implemented by Endicott Interconnect Technologies, Inc. with support from Huron Real Estate Associate, LCC to achieve the annual goal.

c. Please list any other EPA voluntary programs to which you are also reporting these data (e.g., Energy Star, Project XL).

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(continued)

C.3 Performance Commitment 3

a. Use this table to report data related to your third performance commitment.

Category (see page 16 of the instructions): Waste						
Aspect (see page 16 of the instructions): Hazardous Waste Reduction						
	Baseline (as stated in your application)	Year 1	Year 2	Year 3	Performance Commitment (the goal stated in your application)	
Calendar Year	1999	2001	2002	2003		
Actual Quantity (per year)	26739	17307			Continuous improvement when normalized to production	
Measurement Units	Tons of Hazardous Waste generated					
Normalizing Factor*	1.0	0.84			(optional)	
Basis for your Normalizing Factor*	Hazardous Waste is normalized for production by <u>aggregating</u> production volumes for the year and comparing these on a <u>year-by-year</u> basis. Based on year-by-year production volume, hazardous waste reduction from 1999 to 2000 was 0.99 and, from 2000 to 2001 was 0.85 Hazardous waste reduction from 1999 through 2001 is normalized for production by <u>aggregating</u> production volumes for these years. Therefore, the normalizing factor for Yr1999 to Yr2001 = 0.99 x 0.85 = 0.84. Same calculation for normalizing factor is used by Endicott Interconnect Technologies, Inc for reporting achievement from October 2002 to Yr 2003					
Normalized Quantity* (per year)	26739	20604				

^{*}See pages 17-19 of the instructions for more information

Comment: The goal is continuous reduction of hazardous waste generation. This may be in terms of volume or toxicity.

b. Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.

Endicott commitment in the original 1999 application was to continuously reduce the amount of hazardous waste generated when adjusted for production.

In 2001 major Hazardous Waste Reduction was achieved by implementing various hazardous waste reduction projects but, primarily due to the solvent elimination efforts in Ultra Fine Pitch Wire Bond (UFPWB) chip carrier manufacturing. This product line was converted from a <u>solvent</u> based process to an <u>aqueous</u> based process, and resulted in the Endicott facility being recognized with the New York State "Governor's Award for Pollution Prevention". Endicott Interconnect Technologies will continue to operate the aqueous based process previously implemented.

Effective November 1, 2002, Endicott Interconnect Technologies will continue a pollution prevention program, with the goal of continuous reduction in volume or toxicity of hazardous waste, when normalized to production.

c. Please list any other EPA voluntary programs to which you are also reporting these data (e.g., Energy Star, Project XL).

(continued)

C.4 Performance Commitment 4

a. Use this table to report data related to your fourth performance commitment.

Aspect (see page 16 of	the instructions): Co	nsumption					
	Baseline (as stated in your application)	Year 1	Year 2	Year 3	Performance Commitment (the goal stated in your application)		
Calendar Year	1999	2001	2002	2003	2.5 % savings in energy (electricity and fuel) for the current year		
Actual Quantity (per year)	567,487	534,803			(optional)		
Measurement Units	Million Watt Hours or Megawatt Hours (MWH)						
Normalizing Factor*	1.0	1.04			(optional)		
Basis for your Normalizing Factor*	Normalizing Factor: Projected Usage / Current Year Usage, where Projected Usage = Current Year Actual plus the Current Year's conservation Energy is consumed by various manufacture processes, utilities use, and office use. Only the energy consume in manufacture process can be correlated to production of our company, which then EPA normalizing method is applicable to this measurement. However, based on current recording method of energy use, we are not able to separate energy use for manufacturing from the total energy consumption of our company. We will continue to investigate measurement method to normalize energy use with production, but as of now, the normalizing factor is calculated based on actual energy use and implemented project saving.						
Normalized Quantity* (per year)	567,487	514,233			Yr 2003: Goal: 496,606		

^{*}See pages 15-17 of the instructions for more information

b. Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.

The original 1999 application for the Endicott facility had a goal of 4% <u>savings</u> in total energy consumption annually. Endicott Site Energy Conservation Teams implemented numerous energy conservation projects in 2000 and 2001, such as:

- PL/C shutdown of HVAC equipment on nights/weekends
- Reducing/Re-balancing building exhaust levels
- Variable Frequency Drives (VFD) on process pumps and motors
- · Lighting motion detectors and photo eye controls

As a result of these and other conservation efforts:

- ✓ In 2000, implemented projects saved a calculated 27,722 MWH
- ✓ In 2001, implemented projects saved a calculated 21,995 MWH

Projected usage = 534,803 + 21,995 = 556,798 MWH for 2001

Normalizing Factor (2001) = 556,798/534,803 = 1.04

Effective November 1, 2002, Endicott Interconnect Technologies will continue an energy conservation program, with a goal of 2.5% savings in total energy consumption. Energy conservation projects will be identified and implemented by Endicott Interconnect Technologies, and with support from Huron Real Estate Associates, LCC to achieve the annual goal.

c. Please list any other EPA voluntary programs to which you are also reporting these data (e.g., Energy Star, Project XL).

Public Outreach and Performance Reporting

Please briefly summarize the public outreach and reporting activities that your facility has conducted during the year. Feel free, but not obligated, to attach supporting materials (e.g., meeting agendas, public announcements).

From Yr 1999 to October 2002, the Endicott facility participated in the following public outreach and performance reporting activities:

- (1) Annual participation in Broome County Earth Day celebration Earth Fest sponsored by local environmental awareness group Earth Day Southern Tier (EDST).
- (2) Participated in several personal computer take back events where Information Technology (IT) equipment is collected from residents in the local community to be recycled through Endicott's Asset Recovery Operations
- (3) From 1999 to 2002, an Environment and Well-being Report was made available to the public on a company website.
- (4) Environmental staff provided technical assistance to NYSDEC Pollution Prevention Bureau on development of two manuals:
- "Environmental Self-Assessment for the Electronics and Computer Industry" and
- "Environmental Compliance and Pollution Prevention Guide for The Electronics and Computer Industry"
- (5) The site applied for and won the New York State Governor's Award for Pollution Prevention for its implementation of UFPWB Solvent Elimination. This included press releases. The Endicott site was also recognized with an IBM's Corporate Environmental Affairs Excellence Award.

Effective November 1, 2002, Endicott Interconnect Technologies, Inc. will continue public outreach activities, including publishing its environmental performance measurements towards NEPT goals via EPA's website.

Please indicate which of the following methods your facility plans to use to make its Performance Track Annual Performance Report available to the public. Please check as many as are appropriate.

Web site (URL):

EPA website: http://www.epa.gov/performancetrack/program/report.htm

Endicott Interconnect Technologies website: To be determined

Open House

Meetings

Press Releases

Community Advisory Panel

Other

Self-Certification of Continued Program Participation

On behalf of,

Endicott Interconnect Technologies, Inc.

I certify that

- I have read and agree to the terms and conditions specified in *the National Environmental Performance Track Program Guide*. This facility, to the best of my knowledge, continues to meet all program criteria;
- I have personally examined and am familiar with the information contained in this Annual Performance Report. The information contained in this report is, to the best of my knowledge and based on reasonable inquiry, true, accurate, and complete;
- My facility has an environmental management system (EMS), as defined in the Performance Track EMS criteria, including systems to maintain compliance with all applicable federal, state, tribal, and local environmental requirements in place at the facility, and the EMS will be maintained for the duration of the facility's participation in the program;
- My facility has conducted an objective assessment of its compliance with all applicable federal, state, tribal, and local environmental requirements; and the facility has corrected all identified instances of potential or actual noncompliance; and
- Based on the foregoing compliance assessments and subsequent corrective actions (if any were necessary), my facility is, to the best of my knowledge and based on reasonable inquiry, currently in compliance with applicable federal, state, tribal, and local environmental requirements.

I agree that EPA's decision whether to accept participants into or remove them from the National Environmental Performance Track is wholly discretionary, and I waive any right that may exist under any law to challenge EPA's acceptance or removal decision.

I am the senior manager with responsibility for the facility and am fully authorized to execute this statement on behalf of the corporation or other legal entity whose facility is part of the National Environmental Performance Track program.

Signature/Date

Printed Name Mr./Mrs./Ms./Dr. Mr. James J. McNamara

Title President and CEO

Phone Number/E-mail Address 607-755-7039 / jay.mcnamara@eitny.com

Facility Name Endicott Interconnect Technologies, Inc.

Facility Street Address 1701 North Street

Performance Track Identification Number A020028

Paperwork Reduction Act Notice

The public reporting and record keeping burden for this collection of information is estimated to average 188 hours per respondent annually. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, US Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW, Washington, DC 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

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